This Upland Site Summary was authored by National Grid. The opinions, statements, and conclusions herein are solely those of National Grid. They are not adopted by and should not be attributed to any other Person.

The summary in the following sections only comments on the historical site activities and any ongoing effects they may currently be having. Information will be updated as it becomes available.

SITE NAME: NATIONAL GRID – EQUITY FORMER MGP

Address:	222 – 254 Maspeth Avenue in Brooklyn, New York		
Tax Lot Parcel(s):	Brooklyn (Kings County), Block # 2927, Lots #'s 44, 54, and 57		
Latitude:	40°43″02.02″N	Longitude:	73°56′02.33″W
Regulatory Programs/Numbers/Codes:	NYSDEC Site No. 224050, Order on Consent Index #: A2-0552-0606		
Analytical Data Status:	☐Electronic Data Available ☐No Data Available	☒Hardcopies only	

1 SUMMARY OF CONSTITUENTS OF POTENTIAL CONCERN (COPCs) TRANSPORT PATHWAYS TO THE CREEK

The current understanding of the transport mechanisms of contaminants from the upland portions of the Equity Former MGP to Newtown Creek is summarized in this section and Table 1. A site location plan is included as Figure 1.

Overland Transport:

There is insufficient evidence to make a historic pathway determination. Currently, this pathway is not complete.

Bank Erosion:

There is insufficient evidence to make a historic pathway determination. Currently, this pathway is not complete.

Groundwater:

The site is located approximately 900 feet west at its closest point to English Kills, which drains into Newtown Creek and associated waterways. Ongoing Remedial Investigation (RI) activities being performed by National Grid are designed to evaluate the nature and extent of dissolved phase COPCs noted on-site and/or at adjacent off-site properties, including a full determination of groundwater flow directions. Therefore, the pathway has not been evaluated for completeness but will be upon completion of the current RI.

Overwater Activities:

There is insufficient evidence to make a historic pathway determination. Currently, this pathway is not complete.

Stormwater/Wastewater Systems:

There is insufficient evidence to make a historic pathway determination. Currently this pathway is not complete as it relates to historic MGP operations.

Air Releases:

Information related to air releases was not identified in the available historical information reviewed.

2 PROJECT STATUS

A summary of investigation and remedial activities at the site is provided in the following table.

Activity		Date(s)/Comments
Phase 1 Environmental Site Assessment	☒	October 2004, Gannett Fleming
Site Characterization	☒	(254 – Maspeth) October 2004, EEA, Inc (252 – Maspeth) May 2005, Gannett Fleming
Remedial Investigation	☒	(222, 252, and 254 Maspeth) 9/19/09 - ongoing, AECOM
Remedy Selection	☐	
Remedial Design/Remedial Action Implementation	☐	
Use Restrictions (Environmental Easements or Institutional Controls)	☐	
Construction Completion	☐	
Site Closeout/No Further Action Determination	☐	

Notes:
NYSDEC – New York State Department of Environmental Conservation

- NYSDEC Site Code(s): NYSDEC Site No. 224050, Order on Consent Index #: A2- 0552-0606
- NYSDEC Site Manager: Hank Willems

3 SITE OWNERSHIP HISTORY

Respondent Member: ☒Yes ☐No

222 Maspeth Avenue

Owner	Years	Occupant	Types of Operations
None/Unknown	prior to 1888	None, undeveloped	None, undeveloped
None/Unknown	1888 through 1892	Unknown	Empty Lot, Unknown
Equity Gas Light Company	1892 - 1903	Equity Gas Light Co.	Manufactured Gas Plant
The Brooklyn Union Gas Co. (BUG)	1903 through 1929	BUG	Manufactured Gas Plant with associated structures
BUG	1929 through 1951	BUG	Unknown (MGP demolished from 1929 to 1933)
Unknown	1951 through	Unknown	Unknown

	1965		
Unknown	1965 through unknown	Used Value Storage (operator)	storage of used pipe and valves is indicated - three metal clad on wood frame buildings onsite
Newtown Industrial Associates	1973 through 1975	Unknown	Property condemned by NYC on May 8, 1973.
William Rechler	January 1975 Unknown		three metal clad on wood frame buildings onsite
Reckson Associates.	1975 through 1984	Unknown	Unknown
Court order granted ownership to Jack Stearns Executer to Cooper Tank and Welding Co.	November and December 1984	Unknown	Unknown
Cooper Tank and Welding	1984 through 1989	Appears vacant, (assume) Cooper Tank	-NYC records indicate certificates of occupancy for construction debris transfer activities - "Garbage Transfer Storage", there is a smallone story iron building (1990-1995) -222-238 Maspeth Avenue for an open lot to store steel containers and a solid (non-putrescible) waste and construction debris transfer station. Other permitted uses were offices and maintenance shed.(1992)
222 Maspeth Avenue, LLC.	1989 through present	Cooper Tank Recycling	Active construction waste transfer station

252 Maspeth Avenue

Owner	Years	Occupant	Types of Operations
None/Unknown	prior to 1888	None, undeveloped	None, undeveloped
None/Unknown	1888 through 1892	Unknown	Empty Lot, Unknown
Equity Gas Light Company	1892-1903	Equity Gas Light Co.	Manufactured Gas Plant
BUG	1903 through 1929	BUG	Manufactured Gas Plant with associated structures (operations ceased in 1929)
BUG	1929 through 1951	BUG	Unknown (MGP demolished from 1929 to 1933)
Unknown	1951 through 1965	Unknown	Unknown
Unknown	1965 through unknown	Used Valve Storage (operator)	storage of used pipe and valves is indicated - three metal clad on wood frame buildings onsite
part of property sold by estate of Marion Moreno while another part was sold by the same party in 1986 to Frank Galasso. Also in 1986, Tax lien sale	1981 through 1992	Unknown	Not provided to GiacomoBordone,
GiacomoBordone Transfer	1992 to 2006	Fontana Station (possibly)	transfer station for construction debris, parking garage ,and offices
deed transfer from	2006 - Present	Cooper Tank Recycling	Storage/equipment maintenance

GiacomoBordone to Gloria and GiacomoBordone			

254 Maspeth Avenue

Owner	Years	Occupant	Types of Operations
None/Unknown	prior to 1888	None, undeveloped	None, undeveloped
None/Unknown	1888 through 1892	Unknown	Empty lot, Unknown
Equity Gas Light Company	1892-1903	Equity Gas Light Co.	Manufactured Gas Plant
BUG	1903 through 1929	BUG	Manufactured Gas Plant with associated structures (operations ceased in 1929)
BUG	1929 through 1951	BUG	Unknown (MGP demolished from 1929 to 1933)
Unknown	1951 through 1965	Unknown	Unknown
Unknown	1965 through unknown	Used Valve Storage	storage of used pipe and valves is indicated - three metal clad on wood frame buildings onsite
Unknown	unknown through 1986	Unknown	Unknown
ownership of separate parcels by Fontana Transfer and Cooper Tank and Welding.	1986 through 1988	Appears vacant, not provided	NYC records indicate certificates of occupancy for construction debris transfer activities
mortgage obtained by Frank Galasso	1988 through 1997 (exact dates unknown)	Unknown	Galasso Trucking Inc
Spencer (1997) Limited Investment Partnership * *mortgage obtained by Violet McBean*	1997 through 2005 **1999*	Unknown	Unknown
254 Maspeth Avenue, LLC.	2005 through present	Cooper Tank Recycling	Storage and vehicle parking

4 PROPERTY DESCRIPTION

The Equity former MGP site is located at 222 – 254 Maspeth Avenue, Brooklyn, Kings County, New York 11211, approximately 900 feet west of English Kills, between Grand Street and the Brooklyn Queens Expressway (Highway 278). The site is comprised of the following three parcels of land: 222 Maspeth Avenue, 252 Maspeth Avenue, and 254 Maspeth Avenue. Zoning in the site area is M3-1. M3 districts are designated for areas with heavy industries that generate noise, traffic, or pollutants.

The Equity Former MGP site is bounded by the following industrial or commercial facilities/areas:

- To the north - Maspeth Avenue and other National Grid properties (the Gate Station at 285 Maspeth Ave. and the Greenpoint Energy Center at 287 Maspeth Ave.).
- To the south – Industrial/commercial properties abuts the site. They have been occupied by a relatively consistent set of businesses, including a paper company and warehouse since approximately 1965.
- To the east – A truck terminal that has been operated by various parties since the mid-1960's. Currently the property is used by FedEx.
- To the west - A mixture of small businesses have occupied the adjacent properties to the west (across Vandervoort Ave.), including a small sandwich/lunch stand, a truck wash operation, a nail polish warehouse, metal scraping operation, a metal and glass cleaner, and a small business selling health and safety supplies. Additional businesses present along Vandervoort Avenue from the 1930s through the 1990s included a sawdust storage and yarn dying operation.

The ground surface in the area of the former MGP operations is approximately 14 feet above mean sea level. The topography at the site is roughly level. The surface of the 222 Maspeth Avenue parcel is paved with concrete while the 252 and 254 Maspeth Avenue parcels are largely covered with soil and/or crushed stone at the ground surface with essentially no vegetation.

5 CURRENT SITE USE

The site is used as an active C&D processing facility including associated office buildings, maintenance buildings, and open storage/parking areas. Cooper Tank is operating the facility (DEC No. 2-6101-00061/00001). The active waste facility is occupied on the 222 Maspeth Avenue parcel with associated equipment maintenance and storage occurring on the 252

Maspeth Avenue parcel. The 254 Maspeth Avenue parcel currently houses vehicle and equipment storage. The active waste recycling operations area at the 222 Maspeth Avenue parcel includes a surface concrete cap that facilitates scraping and sorting of various C&D waste and scale(s) to weight incoming and outgoing trucks.

6 SITE USE HISTORY

The site has been used for various industrial and commercial activities dating to at least 1892 and generally included the following operations:

Approximate Timeframe	Operations
1892-1929	MGP Water Gas Plant
1929-1951	Owned by BUG – unknown operations
1951-1965	Unknown
1965-1973?	Storage of used pipes and valves
1973-1984	Unknown/vacant (property condemned by NYC on 5-8-73)
1984-present	Various forms of waste recycling/transfer operations

The Site use history of the Equity former MGP site was developed based on a review of the historic Sanborn Fire Insurance maps, aerial photographs for the site as well as other available information including internal BUG plant facility plans and NYC municipal finance records.

The Equity MGP is first evident on 1903 and 1905 BUG facility maps with gas generation, gas storage (430,000 ft^3 relief holder), and cleaning (purifier house) equipment/processes in place. Support facilities include coal storage/delivery facilities and miscellaneous tar and oil storage capacity, including tar wells, tar separators, drip tanks, and gas oil tanks. In addition, there was a structure located just east of the relief holder and identified as an "inlet and outlet pipe well" (shown on the 1903 and 1905 BUG facility maps and later labeled on the 1921 BUG facility map) that appears to have been a pipe chase structure housing piping between the relief holder and the purifier house. On the 1905 map, a well was shown in the northwest corner of the site near Maspeth Avenue. On a later BUG facility plan dated 1932, this well was labeled "6-inch pipe" with a reference stating "salt water." Based on this information, this well may have been an historic water supply well used for plant operations.

The 1907 Sanborn map shows a consistent, although slightly more extensive, plant layout. The plant appears to be developed to its maximum extent on a 1921 BUG facility plan, although largely maintaining the layout shown on the earlier 1903 and 1905 plans. A 1932 BUG plan indicates that the relief holder was partially decommissioned and the 1933 Sanborn map shows that the gas manufacturing equipment had been removed.

According to internal notes written on a BUG facility plan, BUG maintained ownership of the property until September of 1951.

7 CURRENT AND HISTORICAL AREAS OF CONCERN AND COPCs

The ongoing RI has not yet formally delineated specific Areas of Concern (AOCs). The current understanding of historical potential upland general areas of concern at the site is summarized in Table 1. The following sections provide brief discussion of the potential sources and COPCs at the site requiring additional discussion.

7.1 Uplands

Potential historical contaminant sources at the facility include the former gas storage relief holder (430,000 ft^3), gas purifier house, tar and gas oil storage tanks, tar wells, tar separators, and drip tank areas. The expected COPCs for these sources could include: VOCs, PAHs, metals, and cyanide.

Potential current contaminant sources at the facility include leaks and spills from on-site equipment and maintenance areas. The expected COPCs for these areas include petroleum hydrocarbons (TPH-gasoline range and diesel range) and other VOCs (including chlorinated solvents), SVOCs (including PAHs), PCBs, and metals.

7.2 Spills

Documented spills at the site and immediate surrounding areas based on a review of EDR findings are summarized as follows:

Spill No.	Spill Date	Close Date	Material Spilled	Remarks
9610158	11/14/96	02/17/98	Petroleum	1 Rewe Street (Sigagel Assoc.) # 2 fuel oil spill from poor house- keeping.

Spill No.	Spill Date	Close Date	Material Spilled	Remarks
				Property removed soil and UST, placed wells and showed de- creasing trend of contamination and did modeling.
0204002	07/15/02	12/22/05	Unknown hazardous material;	300 Maspeth Avenue (FedEx) Black tarry substance. Memo talks about the removal of 20 550-gal gasoline USTs and surrounding soil. UST entry saying - 23 USTs closed in place at site. One 550-gal used oil UST remaining as temporarily out of service.
0603758	07/15/06	09/12/06	tar	254 Maspeth Avenue

8 PHYSICAL SITE SETTING

8.1 Geology

In general, the geologic setting of Newtown Creek area consists of Quaternary glacial deposits overlying Paleozoic gneiss and schist bedrock (Misut and Monti, 1999). The contact between the glacial deposits and bedrock slopes rather steeply to the southeast, ranging in depth from less than 50 ft bgs near the mouth of Newtown Creek to over 200 ft bgs at the eastern portions of the historical data review area. The near surface geology is of most interest relative to potential groundwater transport pathways from upland sites to the creek. In most areas, a heterogeneous anthropogenic fill unit of variable thickness (generally less than 20 ft thick) immediately underlies the surface. Beneath the fill in most areas are complex upper glacial deposits of Late Pleistocene age consisting of ablation till, outwash, and glaciolacustrine sediments. In some areas near Newtown Creek, a shell-bearing gray silt unit is present beneath the fill; this silt may represent post-glacial intertidal sediments deposited in wetlands adjacent to the creek prior to filling in the 1800s. An extensive sequence of regionally significant glacial units underlies the upper glacial deposits in areas where bedrock is deeper (Misut and Monti, 1999), including the Gardiner's Clay and the underlying Jameco Gravel. The Equity site is near the northern extent of both units as mapped by USGS (1986).

8.2 Hydrogeology

The surface aquifer is typically contained with the upper glacial deposits and the lower portion of the anthropogenic fill layer. Depth to groundwater varies from a few feet to about 30 ft bgs in the historical data review area. Shallow groundwater generally flows towards and discharges to Newtown Creek (Misut and Monti, 1999). The Jameco Aquifer, which underlies the Gardiner's Clay, is confined or semi-confined and is considered to be present beneath the site.

Groundwater was encountered in various site borings reviewed during preparation of the RI Work Plan at depths of approximately 7 to 8 feet bgs within the upper fill deposits across the site. Previous reports indicate that the inferred groundwater flow is southerly, discharging into the English Kills (GFE, 2005). However, a report associated with the investigation/ remediation of a petroleum spill on an abutting property to the east of the Equity former MGP site (300 Maspeth Ave.) indicates that "groundwater flows to the east at the southern portion of the site and to the north at the northern portion of the site" (EDR, 2008c). Additional data to further understand the site hydrogeology is being developed as part of National Grid's ongoing RI at the site.

9 NATURE AND EXTENT (CURRENT UNDERSTANDING OF ENVIRONMENTAL CONDITIONS)

9.1 Soil

Soil Investigations ☒ Yes ☐ No
Bank Samples ☐ Yes ☐ No ☒ Not Applicable

9.1.1 Soil Investigations

Soil samples are being collected as part of National Grid's ongoing RI of the site. The previous investigation activities performed at the site have been limited to the central (252

Maspeth Ave.) and eastern (254 Maspeth Ave.) portions of the site. In summary, moderate to heavy staining and odors were observed within the fill unit to depths of approximately 12 to

15 feet bgs. Despite the noted staining and odors, photoionization detector (PID) readings were generally low (0-5 parts per million). The maximum depth of the geotechnical borings was 31 feet bgs.

The following table provides a summary of the analytical results that exceed the following NYSDEC criteria for soil, 6 NYCRR Subpart 375-6 (Part 375) Commercial Use and Industrial Use Soil Cleanup Objectives.

Analyte	Units	Minimum Soil Concentration	Maximum Soil Concentration
Surface Soil (0 to 2 feet)			
DRO	mg/kg	NS	NS
GRO	mg/kg	NS	NS
Total PCBs	mg/kg	NS	NS
Arsenic	mg/kg	ND	18
Acetone	µg/kg	<5.4	<5.4
Benzene	µg/kg	<5.4	<5.4
Ethylbenzene	µg/kg	<5.4	<5.4
Tetrachloroethene	µg/kg	<5.4	<5.4
Xylene (Total)	µg/kg	<16.4	<16.4
Benzo(a)anthracene	µg/kg	6,000	6,000
Benzo(a)pyrene	µg/kg	4,700	4,700
Benzo(b)fluoranthene	µg/kg	4,300	4,300
Benzo(k)fluoranthene	µg/kg	4,300	4,300
Chrysene	µg/kg	5,700	5,700
Dibenzo(a,h)anthracene	µg/kg	480	480
Indeno(1,2,3-cd)pyrene	µg/kg	1,500	1,500
Phenanthrene	µg/kg	9,300	9,300
Pyrene	µg/kg	14,000	14,000
Subsurface Soil (> 2			***feet)***
DRO	mg/kg	NS	NS
GRO	mg/kg	NS	NS
Total PCBs	mg/kg	NS	NS
Arsenic	mg/kg	ND	46
Acetone	µg/kg	<53	79

Analyte	Units	Minimum Soil Concentration	Maximum Soil Concentration
Benzene	µg/kg	<5.3	9.7
Ethylbenzene	µg/kg	<5.3	460
Tetrachloroethene	µg/kg	<5.3	11
Xylene (Total)	µg/kg	<16.3	1760
Anthracene	µg/kg	510	5,800
Benzo(a)anthracene	µg/kg	2,500	20,000
Benzo(a)pyrene	µg/kg	1,700	15,000
Benzo(b)fluoranthene	µg/kg	1,400	14,000
Benzo(k)fluoranthene	µg/kg	1,400	14,000
Chrysene	µg/kg	1,400	18,000
Dibenzo(a,h)anthracene	µg/kg	<330	1,500
Indeno(1,2,3-cd)pyrene	µg/k	580	7,100
Phenanthrene	µg/kg	1,500	16,000
Pyrene	µg/kg	5,500	36,000

Notes:
mg/kg – milligrams per kilogram
µg/kg – microgram per kilogram NS – Not sampled for this analyte. ND – Not detected.

Available soil data indicate that exceedances of the Part 375 Commercial Use Soil Cleanup Objectives have been limited to PAHs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene) and metals (arsenic).

Associated exceedances of the Part 375 Industrial Use Soil Cleanup Objectives are limited to: benzo(a)anthracene (2 locations); benzo(a)pyrene (10 locations); benzo(b)fluoranthene (2 locations); dibenzo(a,h)anthracene (1 location); and arsenic (3 locations).

9.1.2 Soil Summary

Soil impacts noted at the site during investigation work performed prior to the ongoing RI has documented soil impacts consistent with the historical usage of the site both as an MGP and from urban fill and the use of the site as a waste processing facility. Additional soil data collected during ongoing RI work is needed to fully determine the nature and extent of soil impacts at the site.

9.2 Groundwater

Groundwater Investigations ☒ Yes ☐ No
NAPL Presence (Historical & Current) ☒ Yes ☐ No
Dissolved COPC Plumes ☒ Yes ☐ No
Visual Seep Sample Data ☐ Yes ☐ No ☒ Not Applicable

9.2.1 Groundwater Investigations

Groundwater is being investigated as part of National Grid's ongoing RI of the site. The previous investigation activities performed at the site have been limited to the central (252 Maspeth Ave.) and eastern (254 Maspeth Ave.) portions of the site. On the 252 Maspeth Avenue property, a Phase II Environmental Subsurface Investigation (ESI) was conducted in March 2005 by Gannett Fleming Engineers, P.C. (GFE) on behalf of Cooper Tank and Welding Corp. (Cooper Tank), who was the potential lessee of the property (GFE, 2005). GFE advanced four soil borings (B-1 through B-4), installed temporary PVC wells in two soil borings (B-1 and B-4), and collected groundwater samples for laboratory analysis. Odors and staining were observed in all four borings. VOCs, SVOCs and various metals were detected in groundwater samples collected from both temporary wells. PCBs were detected in one groundwater grab sample, but the detection is likely turbidity related given the relative insolubility of PCBs

in water.

9.2.2 NAPL (Historical and Current) Presence

The potential presence of NAPL is being evaluated as part of National Grid's ongoing RI of the site. The previous investigation activities performed at the site have been limited to the central (252 Maspeth Ave.) and eastern (254 Maspeth Ave.) portions of the site. In summary, moderate to heavy staining and odors were observed within the fill unit to depths of approximately 12 to 15 feet bgs. Moderate to strong odors and visible impacts described as "black sand oil", "oil", and "visible product" indicative of the presence of NAPL were noted at three geotechnical borings (SB-2, SB-3, and SB-5) at depths of 21 to 24 feet bgs, 29 to 31 feet bgs, and 14 to 16 feet bgs, respectively. The maximum depth of the geotechnical borings was 31 feet bgs.

9.2.3 Dissolved Contaminant Plume

Groundwater exceedances for organic constituents were limited to: benzene (1 location); m, p xylenes (1 location); naphthalene (1 location); and PCBs (1 location). Metals exceedances in groundwater were observed at two temporary well locations (B-1 and B-4) in the center of the site It is important to note that PCBs and many of the metals detected are not typically associated with MGP residuals and may be artifacts of more recent site use and suspected turbidity in the previous groundwater grab samples. The current understanding of dissolved phase impacts in groundwater is provided on the table below.

Analyte	Units	Minimum Groundwater Concentration	Maximum Groundwater Concentration
Total PCBs	µg/L	<1	2
Arsenic	mg/L	1.2	2.3
Barium	mg/L	23	39
Beryllium	mg/L	ND	0.06
Cadmium	mg/L	ND	0.52
Chromium	mg/L	2.5	3.3
Copper	mg/L	21	45
Lead	mg/L	44	130
Mercury	mg/L	0.079	0.26
Nickel	mg/L	2.2	2.6
Selenium	mg/L	0.14	0.16
Zinc	mg/L	49	130
Benzene	µg/L	<1	1
Cyclohexane	µg/L	NS	NS
Isopropylbenzene	µg/	<1	<1
m,p-Xylenes	µg/L	<2	7
Methyl tert-butyl Ether	µg/L	<1	<1
Methylcyclohexane	µg/L	NS	NS
o-Xylene	µg/L	<1	4
Toluene	µg/L	<1	4
Benzo(a)anthracene	µg/L	<1	<10
Benzo(b)fluoranthene	µg/L	<1	<10
Benzo(k)fluoranthene	µg/L	<1	<10
Chrysene	µg/L	<1	<10
Indeno(1,2,3-cd)pyrene	µg/L	<1	<10
Naphthalene	µg/L	<1	13
Pyrene	µg/L	<1	18

Notes:
µg/L – micrograms per liter
ND – Not detected, detection limits not provided in source documents
NS – analyte not sampled for

9.2.4 Groundwater Summary

Groundwater impacts noted at the site during investigation work performed prior to the ongoing RI has documented groundwater impacts consistent with the historical usage of the site both as an MGP and from urban fill and/or the use of the site as a waste processing facility. Additional groundwater data being collected during ongoing RI work is needed to fully determine the nature and extent of dissolved phase impacts in groundwater at the site.

9.3 Surface Water

Surface Water Investigation	☐ Yes ☒ No
SPDES Permit (Current or Past)	☐ Yes ☒ No
Industrial Waste Discharge Permit (Current or Past)	☐ Yes ☒ No
Stormwater Data	☐ Yes ☒ No
Catch Basin Solids Data	☐ Yes ☒ No
Wastewater Data	☐ Yes ☒ No

National Grid does not own or operate the site or have current operations at the site. Therefore, all the above questions were answered no.

9.3.1 Surface Water Investigation

No surface water investigation data were found in reviewed documents.

9.3.2 Stormwater and Wastewater Systems

This site is within the Newtown Creek Water Pollution Control Plant (NC WPCP) sewershed.

Stormwater and wastewater discharges from the site flow into separate municipal sewer systems. Wastewater is conveyed to the WPCP for treatment prior to discharge. Stormwater is conveyed to Newtown Creekand discharged without treatment at outfall ST-22. Although sanitary discharges from the site flow into a separate local municipal system it is likely that the separate local system flows into a larger combined system prior to reaching the treatment plant. When the combined flows exceed the system's capacity, untreated combined sewer overflows (CSOs) are discharged to Newtown Creek.

9.3.3 SPDES Permit

Information reviewed in available records indicates that the site has not been issued a current or historic SPDES permit.

9.3.4 Surface Water Summary

No surface water investigation data were found in reviewed documents and the surface water pathway is not considered as part of National Grid's ongoing RI of the site.

9.4 Sediment

Creek Sediment Data ☐ Yes ☒ No ☐ Not Applicable

9.5 Air

Air Permit	☐ Yes ☒ No
Air Data	☐ Yes ☒ No

10 REMEDIATION HISTORY (INTERIM REMEDIAL MEASURES AND OTHER CLEANUPS)

Information related to remediation was not found in reviewed documents. National Grid is currently in the process of completing an RI for this site.

11 BIBLIOGRAPHY/INFORMATION SOURCES

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Sanborn Maps for 1888, 1907. 1933, 1951, 1965, 1968, 1977, 1979, 1980, 1981, 1986, 1987, 1988, 1990, 1991, 1992, 1993, 1994, and 1995.

12 ATTACHMENTS

Figures

Figure 1 Site Location Map: Equity Former MGP

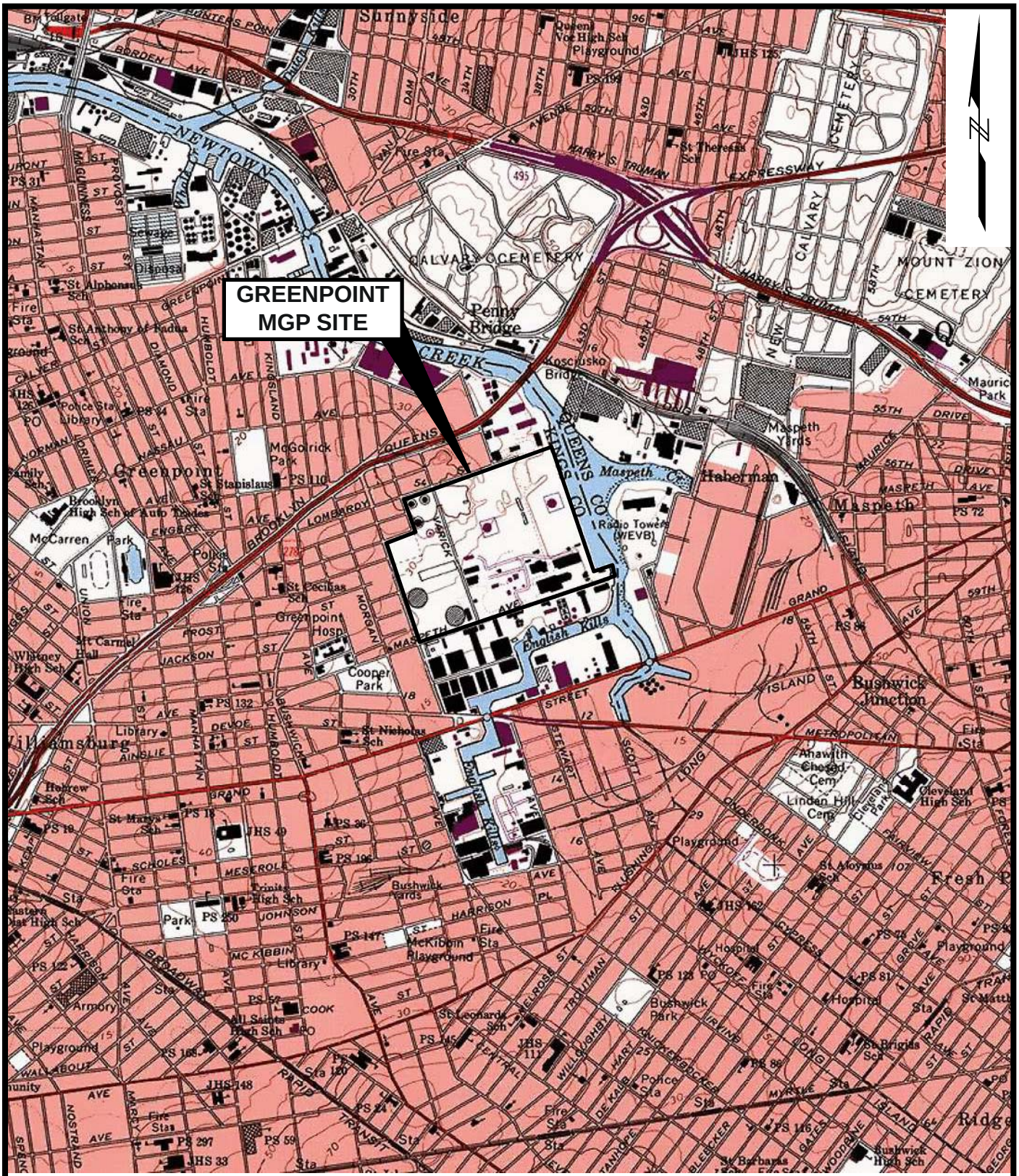
Tables

Table 1 Potential Areas of Concern and Transport Pathways Assessment

Table 1
Potential Areas of Concern and Transport Pathways Assessment – Equity Former MGP Site

Potential Areas of Concern	Media Impacted COPCs					TPH			VOCs												Potential COPC Migration Pathway[1]					
	Surface Soil	Subsurface Soil	Groundwater	Catch Basin Solids	River Sediment	Gasoline-Range	Diesel – Range	Heavier – Range	Petroleum Related (e.g., BTEX)	VOCs	Chlorinated VOCs	SVOCs	PAHs	Phthalates	Phenolics	Metals	PCBs	Herbicides and Pesticides	Dioxins/ Furans	Overland Transport	Groundwater	Direct Discharge – Overwater	Direct Discharge –Storm/ Wastewater	Discharge to Sewer/CSO	Bank Erosion
Releases from Former MGP Operations Areas (gas Holder, tanks, piping, etc.	√	√	√	?	?	?	?	?	√	√	?	?	√	?	?	?	?	?	?	?	√	?	?	?	?

Notes:
√ - COPCs are/were present in Areas of Concern having a current or historical pathway that is determined to be complete or potentially complete
? - There is not enough information to determine if COPC is/was present in Area of Concern or if pathway is complete
-- - Current or historical pathway has been investigated and shown to be not present or incomplete
[1] COPC detected in one or media. Migration pathway not yet evaluated.
COPCs – Constituents of Potential Concern
BTEX - Benzene, toluene, ethylbenzene, and xylenes
PAHs - Polycyclic aromatic hydrocarbons SVOCs - Semi-volatile Organic Compounds TPH - Total Petroleum Hydrocarbons
VOCs - Volatile Organic Compounds



SOURCE: Map created with TOPO! ® ©2001 National Geographic (www.nationalgeographic.com/topo)

GREENPOINT ENERGY CENTER
BROOKLYN, NEW YORK

nationalgrid

GEI Consultants

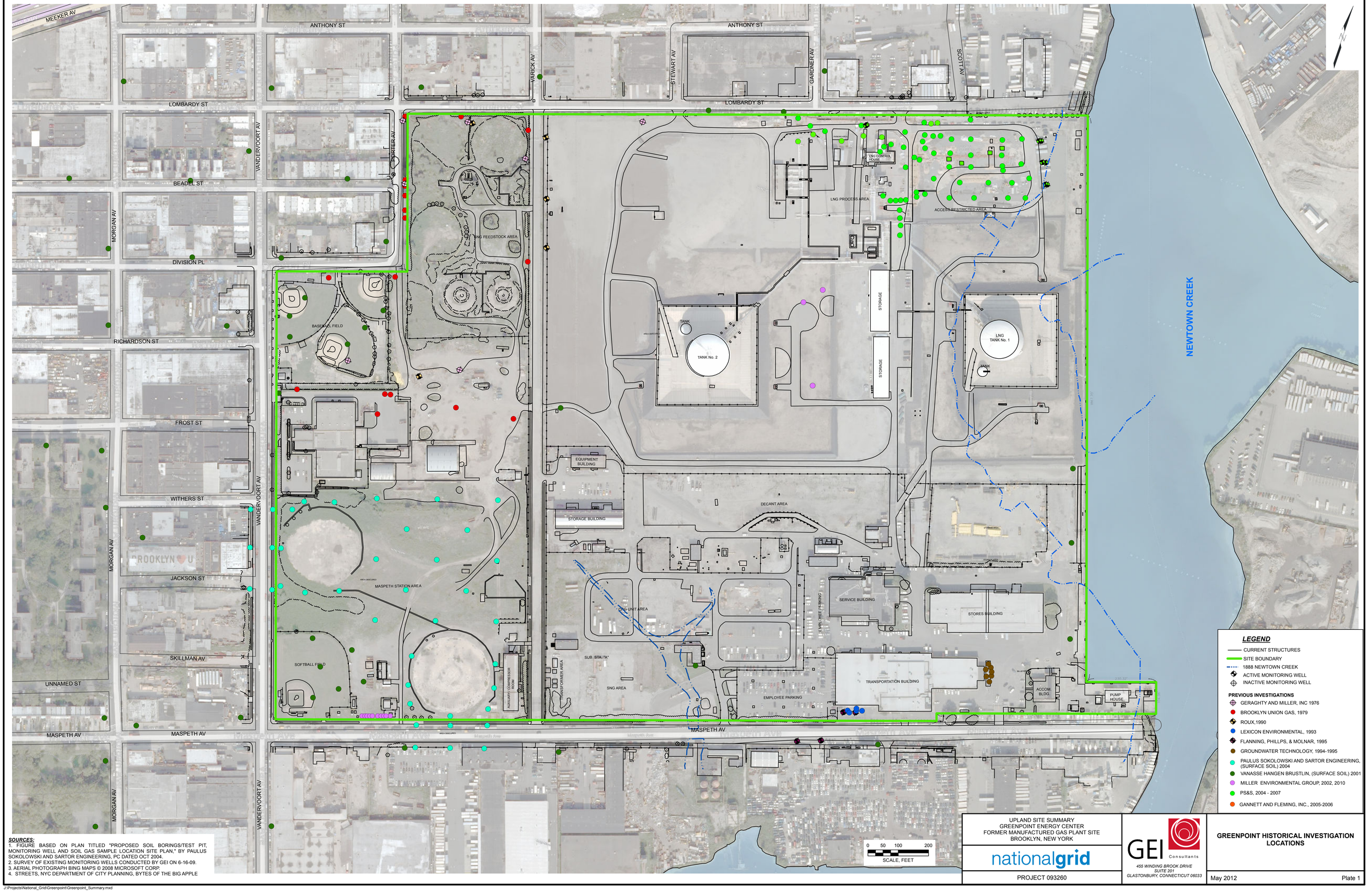
SITE LOCATION MAP

PROJECT 093260

January 2012

Figure 1

J:\Projects\National Grid\Greenpoint\Greenpoint Site Location Map-updated July 2011.ppt



LEGEND

- CURRENT STRUCTURES
- SITE BOUNDARY
- 1888 NEWTOWN CREEK
- ACTIVE MONITORING WELL
- INACTIVE MONITORING WELL

PREVIOUS INVESTIGATIONS

- GERAGHTY AND MILLER, INC 1976
- BROOKLYN UNION GAS, 1979
- ROUX,1990
- LEXICON ENVIRONMENTAL, 1993
- FLANNING, PHILLPS, & MOLNAR, 1995
- GROUNDWATER TECHNOLOGY, 1994-1995
- PAULUS SOKOLOWSKI AND SARTOR ENGINEERING, (SURFACE SOIL) 2004
- VANASSE HANGEN BRUSTLIN, (SURFACE SOIL) 2001
- MILLER ENVIRONMENTAL GROUP, 2002, 2010
- PS&S, 2004 - 2007
- GANNETT AND FLEMING, INC., 2005-2006

SOURCES:

1. FIGURE BASED ON PLAN TITLED "PROPOSED SOIL BORINGS/TEST PIT, MONITORING WELL AND SOIL GAS SAMPLE LOCATION SITE PLAN," BY PAULUS SOKOLOWSKI AND SARTOR ENGINEERING, PC DATED OCT 2004.
2. SURVEY OF EXISTING MONITORING WELLS CONDUCTED BY GEI ON 6-16-09.
3. AERIAL PHOTOGRAPH BING MAPS © 2008 MICROSOFT CORP.
4. STREETS, NYC DEPARTMENT OF CITY PLANNING, BYTES OF THE BIG APPLE

UPLAND SITE SUMMARY
GREENPOINT ENERGY CENTER
FORMER MANUFACTURED GAS PLANT SITE
BROOKLYN, NEW YORK

nationalgrid

PROJECT 093260

GEI Consultants
455 WINDING BROOK DRIVE
SUITE 201
GLASTONBURY, CONNECTICUT 06033

GREENPOINT HISTORICAL INVESTIGATION LOCATIONS

May 2012

Plate 1

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